

Project: R-2911C County: Rowan

# PROJECT SPECIAL PROVISIONS Utility Construction

#### I. GENERAL CONSTRUCTION REQUIREMENTS:

# Specifications:

The proposed utility construction shall meet the applicable requirements of the NC Department of Transportation's "Standard Specifications for Roads and Structures" dated January 2002, and the following provisions.

Lay water mains at least 10 feet laterally from existing or proposed sanitary sewers.

The depth of pipeline installation may vary to achieve minimum clearance of existing or proposed utilities or storm drainage while maintaining minimum cover specified (whether existing or proposed pipelines, conduits, cables, mains and storm drainage are shown on the plans or not).

After the installed pipe, fittings, valves, hydrants, corporation stops and end plugs are inserted and secured, the pipe line shall be subjected to a hydrostatic pressure test of 200 PSI for a period of 2 hours, by pumping the section full of clean water using an approved pressure pump. Cross connection for flushing and chlorination shall be made by means of a temporary connection from the supply pipe with an approved backflow prevention device. Taps for the cross connection piping shall be made to the portion of the existing water main that will be removed from service. The proposed water main shall be laid to within one pipe length of the point of final connection prior to flushing and testing. All flushing and chlorination work shall be preformed in accordance with AWWA C651-99. All fittings, valves and backflow prevention devices required for chlorination and testing shall be incidental to the cost of the proposed pipe being tested.

Contractor shall make such arrangements, as the utility owner requires, for measuring and paying for water required to flush and test water mains.

Copies of bacteriological testing reports shall be provided to the utility owner prior to activating new water mains.

All existing fire hydrants that are in poor condition and are to be relocated will be replaced with new fire hydrants supplied by the owner.

# Owner and Owner's Requirements:

The existing utilities belong to the Town of Cleveland and Salisbury-Rowan Utilities. The Contractor shall provide access for the owner's representatives to all phases of construction. Notify the owner two weeks before commencement of any work and one week before service interruption. The contractor may be required to work nights or weekends to make tie-ins for proposed water lines.

#### PREQUALIFICATION OF UTILITY CONTRACTORS

All contractors that desire to perform water and sewer line construction for this project shall first be prequalified by the City of Salisbury. Below is a listing of five (5) approved utility contractors that are currently prequalified to perform utility work for the City.

Contractor	Location
Bell Construction Company	Statesville, NC
Inc.	
B.R.S., Inc.	Richfield, NC
Foothills Water and Sewer	Stony Point, NC
Propst Construction Co., Inc.	Concord, NC
Ronny Turner Construction	Hickory, NC
Co.	-

In the event a utility contractor wishes to become prequalified, please contact Mr. Jim Behmer, Salisbury-Rowan Utilities Department; Utilities Engineering Manager, at (704) 638-5202 for the prequalification package. The contractor shall allow five working days for approval after submittal of the prequalification package to the City.

Utility Locations Shown on the Plans:

The location, size, and type material of the existing utilities shown on the plans are from the best available information. The Contractor will be responsible for determining the exact location, size, and type material of the existing facilities

No direct payment will be made for utility construction work required by the preceding provisions, which are general requirements applying to utility construction, and all of the requirements stated will be considered incidental work, paid for at the contract unit prices of the various utility items included in the contract.

## II. COMPENSATION:

No direct payment will be made for utility construction work required by the preceding provisions, which are general requirements applying to utility construction, and all the requirements stated will be considered incidental work.

paid for at the contract unit prices of the various utility items included in the contract.

## 1. BEDDING MATERIAL:

Bedding material for utility lines shall be installed in accordance with the applicable utility provisions herein, as shown on the utility construction plans, and/or as directed by the Engineer.

Bedding material shall meet the requirements of Article 1016-3 of the Standard Specifications. Bedding material shall be installed in accordance with Articles 300-6 and 300-7 of the Standard Specifications.

Bedding material installed in accordance with the plans and provisions herein and accepted, will be measured and paid for at the contract unit price per ton for "Bedding Material, Utilities Class IV". Such prices and payments shall be full compensation for all materials, labor, equipment, compaction and shaping the bedding material in accordance with Article 300-4 of the Standard Specifications, and incidentals necessary.

# 2. POLYETHYLENE (PE) PLASTIC WATER TUBING:

Polyethylene plastic water tubing shall be installed in accordance with the applicable utility provisions herein, as shown on the utility plans, and/or as directed by the Engineer.

PE water tubing shall conform to ASTM D2737 or AWWA C901. PE tubing materials shall be either PE 2406, PE 3406 or PE 3408 depending upon the required pressure class and dimension ratio (SDR) specified on the plans. Polyethylene plastic water tubing shall meet the requirements of the National Sanitation Foundation Seal of Approval for potable water.

The ends of the plastic water tubing shall be connected using approved compression type couplings and/or compression type fittings. Such couplings and fittings shall have been approved by the Engineer.

Polyethylene plastic water tubing, installed in accordance with the plans and provisions herein and accepted, will be measured along the pipe from end to end, with no deductions for fittings or couplings, and paid for at the contract unit price per linear meter for "\_\_\_\_" PE Water Tubing, SDR 9, 200# WP". Such prices and payments will be full compensation for furnishing all labor, equipment, material, compression couplings and fittings, excavation, chlorinating, backfilling, and incidentals necessary to complete the work as required.

### 3. BLOW-OFF ASSEMBLY:

Blow-off assemblies shall be installed as directed by Rowan County, as required by these provisions, and/or as directed by the Engineer.

Blow of assemblies shall consist of a DI Tee, 6" DI Water Pipe, PC 350, " Gate Valve and Valve Box, 200# WP and a Flap Valve. All materials shall conform to the latest edition of the Standard Specifications for Roads and Structures.

Flap valve shall conform to the latest AWWA Standards.

The quantity of blow-off assemblies furnished, installed and accepted, shall be measured and paid for at the contract unit price per each for "Blow-Off Assembly". Such prices and payment shall be full compensation for all materials, labor, equipment, excavation, backfill and incidentals necessary to complete the work.

#### 4. BUTTERFLY VALVE AND MANHOLE:

Butterfly valves and manholes shall be installed in accordance with the applicable utility provisions herein, as shown on the utility plans, and/or as directed by the Engineer.

Butterfly valves shall conform to ANSI/AWWA C504 for Class 150 valves with Oring shaft seals. Such valves shall have mechanical joint ends, a manual actuator with 2" operating nut and shall be designed for manhole installation. Butterfly valves shall open counterclockwise.

The manholes shall be 5' diameter with flat top and shall conform to ASTM C478. Joints between precast manhole sections shall be O-ring rubber gaskets conforming to ASTM C-443 or butyl rubber gaskets conforming to AASHTO M198.

Water tight manhole frames and covers shall be of cast iron conforming to ASTM A48 Class 30, shall be traffic bearing, and shall have machined contact surfaces. Manhole frames and covers shall be as shown on plans or an approved equal.

The quantity of butterfly valves and valve manholes, installed in accordance with the plans and provisions herein and accepted, will be measured and paid for at the contract unit price per each " 16" Butterfly Valve and Manhole. Such prices and payments will be full compensation for all materials, excavation, labor, installation, sterilization, pressure testing, valve manhole, backfilling, and incidentals necessary to complete the work as required.

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# PROJECT SPECIAL PROVISIONS Utility

#### **UTILITY CONFLICTS:**

#### General:

The following utility companies have facilities that will be in conflict with the construction of this project:

- A. DUKE POWER COMPANY
- B. BELLSOUTH TELECOMUNICATION COMPANY
- C. TIME WARNER CABLE
- D. PIEDMONT NATURAL GAS

The conflicting facilities of these concerns will be adjusted prior to the date of availability, unless otherwise noted and are therefore listed in these special provisions for the benefit of the Contractor. The utility owners will do all utility work listed herein. All utilities are shown on the plans from the best available information.

The Contractor's attention is directed to Article 105.8 of the Standard Specifications.

**Utilities Requiring Adjustment:** 

### A. DUKE POWER COMPANY

These facilities will be relocated and finished by February 28 2005.

See Utility Conflict Plan for details.

#### C. BELLSOUTH TELECOMUNICATION COMPANY

These facilities (underground cable) will be abandoned and relocated in joint use with power poles and finished by April 15 2005.

See Utility Conflict Plan for details.

#### E. TIME WARNER CABLE

Time Warner Cable will relocate in joint use with power poles and finished by March 15 2005.

See Utility Conflict Plan for details.

# D. PIEDMONT NATURAL GAS

Existing Facilities will remain in place and be adjusted as necessary with one-week notice and one week to complete each relocation.

See Utility Conflict Plan for details.

Contact David Billingsley with Piedmont at 704-633-9066.